

## 2d - [Collision Lab](#) investigation 2 method 1

purpose: determine if momentum and kinetic energy are conserved in collisions at different angles.

procedure refer to physics 12 lab manual  
Investigation 2 method 1

### Observations:

groups of 2 or 3 hand in paper you tape to the ground with dots labelled.

3 drops 3 times (skip part of the lab)

1 set of 3 drops - no collision, incident ball.

mass of incident ball \_\_\_\_\_

d of centroid of 3 dots to plumb line \_\_\_\_\_

2nd set of 3 drops - collision with small

angle mass of target ball \_\_\_\_\_


d to incident ball \_\_\_\_\_ x component \_\_\_\_\_

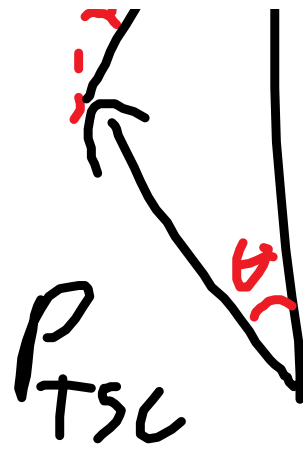
d to target ball \_\_\_\_\_ x component \_\_\_\_\_

3rd set of 3 drops - collision with larger

d to target ball\_\_\_\_\_ x component\_\_\_\_\_



$P_{ISC} \rightarrow$    $P_{INC} = \frac{m_I d_{INC}}{\sqrt{\frac{2\hbar}{c}}}$



$$V \frac{a}{g}$$

Components

$$\sum E_k$$